

FIGURES AND SEQUENCES (600-1-284P)

(locations of polymorphisms or sites of polymorphisms appear in bold underline)

FIGURE 1 AND SEQ ID NO:1

Wild-type gene

-177 CTGCCGGCTC ACTCGGCTGC TCGTCTGGT CTGGCGTCTG CTGAGAAGAT CCTCTTCTAC
-117 CCTGCTCTGC ACCTGTGCTC GACTGCCAGC CGGCTGAGGG CGGGGGTCTC CACGGTGGTC
-57 CCAGCTCCCA AGGAGGTTGC AGAA

1 gtaagg gcctgagccg ctggaggtcg ggtgggggtc **IVS I**
37 ctgctgacag actgcagcaa agcagggcgg gtggaggggg caggaggaag ctgggtccca
97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgcgt gtgcgtgagg gcaggttttg
157 gcatttctgt gtgtctgtgt gtgtgacttg tgtccctgca tccctgtgcc tgtgaacacg
217 cgagtggctg tgtgttcac agtccctgtg ggtggacacg tgtcctgggg tgtagctgcc
277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
337 tgtgtctttg tgttctgtga gtccctgtct gtgcacacgt gtcctcgtgt ctccatgtgt
397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gcccggtgtg ctcagtgtct
457 ctccgctggg cgtgtgtctg gcaactgcagc cacttgtctc tgcgctctgt ccag

-33 GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG **ATG Start**
4 GAGCCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
124 CACGGCGCCT TCCTGCCCCCT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
184 TGTGTGCGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCCTG
304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCC
364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTCACCCTA
424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
484 CGCACGTCCA GCAAAGCCCA GGCTGTCAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

1 gtca gtgggggtgc **IVS III**
15 ccctcctccc ctcaccaggc tccctggctc cggggtggct cctctggggc caggtgcct
65 ccacgtctcc tgggcccact ctgaccccgt ttctctccct gcag

590 AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
844 TTCGTGCTGG CCCAAGGGCT GGGGGTTTCT CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCT CTACGCCTTC

1 964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
 2 1024 GACGTGCAGG TGTCTGACCG CGTGCGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
 3 1084 ACCTCTGAGA CGGTACCGCG GCGCGCAT**GA** CTAGGCGTGG ACCTGCCCAT GGTGCCTGTC
 4 1144 AGCCCGCAGA GCGCATCTAC GCGCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
 5 1204 GACACACCCT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTCCCTG TGGGCCAGGG
 6 1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA
 7 1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
 8 1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGCCGT TACTGGAGCC CGTGCCCTC
 9 1444 CCTCCCCGTG CTTTCATGTGA CTCTGGCCT CTCTGCTGCT GCGTTGGCAG AACCTGGGT
 10 1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
 11 1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
 12 1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
 13 1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTT CCACTCCACC TGTGCAGCCG
 14 1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

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Intron sequences (IVS I and IVS III) are shown in small case letters. Numbering for each IVS begins with +1 for the first base of the intron; numbering is specific for each intron. mRNA sequence is shown in capital letters. +1 is assigned to the first base of the initiation codon. Nucleotides upstream (5') from the initiation codon are assigned negative numbers. The ATG initiation codon and TGA stop codon are shown in bold. Locations of identified SNPs are also shown in bold and underlined.

FIGURE 2 AND SEQ ID NO:2
 Wild-type Intron I (IVS I)

1 gtaagg gcctgagccg ctggaggtcg ggtgggggtc
 37 ctgctgacag actgcagcaa agcagggcgg gtggaggggg caggaggaag ctgggtccca
 97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgc**gt** gtgcgtgagg gcaggtttgg
 157 gcatttctgt gtgtctgtgt gtgtgacttg tgtccctgca tccctgtgcc tgtgaacacg
 217 cgagtggctg tgtgttcacg agtccctgtg ggt**gg**acacg tgtcctgggg ttagctgcc
 277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
 337 tgtgtctttg tgttctgtga gtccctgtct gtgcacacgt gtcctcgtgt ctccatgtgt
 397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gccctgtgtc ctcatgtctt
 457 ctccgctggg cgtgtgtctg gcaactgcagc cacttgtctc tgcgctctgt cccag

FIGURE 3 AND SEQ ID NO:3
 G-46A polymorphism in 5'-untranslated region

-177 CTGCCGGCTC ACTCGGCTGC TGCGTCTGGT CTGGCGTCTG CTGAGAAGAT CCTCTTCTAC
 -117 CCTGCTCTGC ACCTGTGCTC GACTGCCAGC CGGCTGAGGG CGGGGGTCTC CACGGTGGTC
 -57 CCAGCTCCCA AAGAGGTTGC AGAA

FIGURE 4 AND SEQ ID NO:4

GIVS I 135C polymorphism in intron I

1 gtaagg gcctgagccg ctggagggtcg ggtggggggtc
 37 ctgctgacag actgcagcaa agcagggcggt gtggagggggg caggaggaag ctgggtccca
 97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgcct gtgcgtgagg gcaggtttgg
 157 gcattttctgt gtgtctgtgt gtgtgacttg tgtccctgca tccctgtgcc tgtgaacacg
 217 cgagtggctg tgtgttcacg agtccctgtg ggtggacacg tgtcctgggg tgtagctgcc
 277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
 337 tgtgtctttg tgttctgtga gtccctgtct gtgcacacgt gtccctgtgt ctccatgtgt
 397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gcccggtgtc ctccgtgtct
 457 ctccgctggg cgtgtgtctg gcactgcagc cacttgtctc tgcgctctgt ccag

FIGURE 5 AND SEQ ID NO:5

GIVS I 250A polymorphism in intron I

1 gtaagg gcctgagccg ctggagggtcg ggtggggggtc
 37 ctgctgacag actgcagcaa agcagggcggt gtggagggggg caggaggaag ctgggtccca
 97 ggcgtttctg ggtgtgtctc agtctctttt gtgcctgcct gtgcgtgagg gcaggtttgg
 157 gcattttctgt gtgtctgtgt gtgtgacttg tgtccctgca tccctgtgcc tgtgaacacg
 217 cgagtggctg tgtgttcacg agtccctgtg ggtagacacg tgtcctgggg tgtagctgcc
 277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
 337 tgtgtctttg tgttctgtga gtccctgtct gtgcacacgt gtccctgtgt ctccatgtgt
 397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gcccggtgtc ctccgtgtct
 457 ctccgctggg cgtgtgtctg gcactgcagc cacttgtctc tgcgctctgt ccag

FIGURE 6 AND SEQ ID NO:6

GIVS I 251A polymorphism in intron I

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1          gtaagg gcctgagccg ctggaggtcg ggtggggggtc
37 ctgctgacag actgcagcaa agcagggcggtg gtggaggggg caggaggaag ctgggtccca
97 ggcgtttctg ggtgtgtctc agtctctttt gtgcttgcgt gtgctgaggg gcaggtttgg
157 gcatttctgt gtgtctgtgt gtgtgacttg tgtccctgca tccctgtgcc tgtgaacacg
217 cgagtggctg tgtgttcatc agtccctgtg ggtgaacacg tgtcctgggg ttagctgcc
277 tccaggcacc ctgtgtgtga gtctctaaac caaatgggac cgtgtccttg cgggtgcatg
337 tgtgtctttg tgttctgtga gtccctgtct gtgcacacgt gtccctgtgt ctccatgtgt
397 ccctgcatgt gcatgtgtgc ctgtgtgttc tgggtgtgtg gcccggtgtg ctccagtgtct
457 ctccgctggg cgtgtgtctg gcactgcagc cacttgtctc tgcgtctctg cccag

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FIGURE 7 AND SEQ ID NO:7

C510T polymorphism in coding region

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-33          GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG  ATG Start
4  GAGCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
124 CACGGCGCCT TCCTGCCCCCT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
184 TGTGTGGGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCTTG
304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTACCCTTA
424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
484 CGCACGTCCA GCAAAGCCCA GGCTGTAAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

590          AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCTTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCAGGTC
844 TTCGTGCTGG CCCAAGGGCT GGGGGTTTCT CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCTT CTACGCCCTT
964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
1024 GACGTGACAG TGCTGACCG CGTGCAGC ATTGCCAAGG ACGTGGCCCT GGCTGCAAG
1084 ACCTCTGAGA CGGTACCGCG GCGCGCATGA CTAGGCGTGG ACCTGCCCAT GGTGCCTGTC
1144 AGCCCGCAGA GCGCATCTAC GCGCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
1204 GACACACCTT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCTTG TGGGCCAGGG
1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA

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1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CTCCTGGTG CAGGGCCGAG GGGACACAAG
 1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCTC
 1444 CCTCCCCGTG CTTTCATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCTGGGT
 1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
 1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
 1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
 1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTC CGACTCCACC TGTGCAGCCG
 1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

FIGURE 8 AND SEQ ID NO:8

CIVS III 67T polymorphism in intron III

-33 GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG **ATG Start**
 4 GAGCCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
 64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
 124 CACGGCGCCT TCCTGCCCCCT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
 184 TGTGTCGGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
 244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCTCTG
 304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
 364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTACCCCTA
 424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
 484 CGCACGTCCA GCAAAGCCCA GGCTGTAAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
 544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

 1 gtca gtggggtgtc **IVS III**
 15 cctctctccc ctcaccaggc tccctggctc ccgggtggct cctctgggcc ca~~t~~gtgccct
 65 ccacgtctcc tgggcccact ctgaccccg tctctctcct gcag

 590 AGAT CGAGTGCCTG
 604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCTC
 664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
 724 CTCCGTGGAG TCCGCCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
 784 ACTCGGCTGG TGCTGGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
 844 TTCGTGCTGG CCAAGGGCT GGGGGTTCAG CCGAGCAGCG AGACTGCCGT GGCCATTCTG
 904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCT CTACGCCTTC
 964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
 1024 GACGTCAGG TGTCTGACCG CGTGCGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
 1084 ACCTCTGAGA CCGTACCGCG GCCCGCATGA CTAGGCGTGG ACCTGCCCAT GGTGCCTGTC
 1144 AGCCCGCAGA GCCCATCTAC GCCAACACA GAGCTCACAC AGGTCACCTG TCTCTAGGCG
 1204 GACACACCCT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTCCCTG TGGGCCAGGG
 1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA

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1      1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
2      1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCCCTC
3      1444 CCTCCCCGTG CTTCATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCCCTGGGT
4      1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
5      1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
6      1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
7      1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTC CGACTCCACC TGTGCAGCCG
8      1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

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FIGURE 9 AND SEQ ID NO:9

A804G polymorphism in coding region

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-33      GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG ATG Start
4  GAGCCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGTGCT CAATGCCAGC
124 CACGGCGCCT TCCTGCCCCCT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
184 TGTGTGCGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCTCTG
304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTACCCCTA
424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
484 CGCACGTCCA GCAAAGCCCA GGCTGTCAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
544 GGTGTTCCTG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG

590      AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT GGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
844 TTCGTGCTGG CCAAGGGCT GGGGGTTCAG CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCT CTACGCCTTC
964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
1024 GAGTGCAGG TGTCTGACCG CGTGCGCAGC ATTGCCAAGG ACGTGGCCCT GGCCTGCAAG
1084 ACCTCTGAGA CGGTACCGCG GCCCGCATGA CTAGGCGTGG ACCTGCCCCAT GGTGCCTGTC
1144 AGCCCGCAGA GCCCATCTAC GCCCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
1204 GACACACCTT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCTTG TGGGCCAGGG
1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA
1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCCCTC
1444 CCTCCCCGTG CTTCATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCCCTGGGT
1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT

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1 1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
2 1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
3 1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTT CCACTCCACC TGTGCAGCCG
4 1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

FIGURE 10 AND SEQ ID NO:10
C1026T polymorphism in coding region

-33 GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG ATG Start
4 GAGCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
124 CACGGCGCCT TCCTGCCCCCT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
184 TGTGTCGGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCTCTG
304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTCACCCTA
424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
484 CGCACGTCCA GCAAAGCCCA GGCTGTCAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG
590 AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCTCTC
664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCTGCT CTCGGGCTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT AGTGGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
844 TTCGTGCTGG CCCAAGGGCT GGGGGTTCAG CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCT CTACGCCTTC
964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
1024 GATGTCAGG TGTCTGACCG CGTGCAGAGC ATTGCCAAGG ACGTGGCCCT GGCTGCAAG
1084 ACCTCTGAGA CGGTACCGCG GCGGCATGA CTAGGCGTGG ACCTGCCCCT GGTGCCTGTC
1144 AGCCCGCAGA GCGCATCTAC GCGCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
1204 GACACACCCT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCTTG TGGGCCAGGG
1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA
1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCTC
1444 CCTCCCGGTG CTTTATGTGA CTCTTGGCCT CTCTGCTGCT GCGTTGGCAG AACCTGGGT
1504 GGGCAGGCAC CCGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTT CCACTCCACC TGTGCAGCCG
1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

FIGURE 11 AND SEQ ID NO:11

C1126G polymorphism in 3'-untranslated region

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-33          GTACCG TACAGAGTGG ATTTGCAGGG CAGTGGCATG  ATG Start
4
5      4 GAGCCCTCT TCCCCGCGCC GTTCTGGGAG GTTATCTACG GCAGCCACCT TCAGGGCAAC
6
7     64 CTGTCCCTCC TGAGCCCCAA CCACAGTCTG CTGCCCCCGC ATCTGCTGCT CAATGCCAGC
8
9    124 CACGGCGCCT TCCTGCCCCCT CGGGCTCAAG GTCACCATCG TGGGGCTCTA CCTGGCCGTG
10
11   184 TGTGTGCGAG GGCTCCTGGG GAACTGCCTT GTCATGTACG TCATCCTCAG GCACACCAAA
12
13  244 ATGAAGACAG CCACCAATAT TTACATCTTT AACCTGGCCC TGGCCGACAC TCTGGTCCTG
14
15  304 CTGACGCTGC CCTTCCAGGG CACGGACATC CTCCTGGGCT TCTGGCCGTT TGGGAATGCG
16
17  364 CTGTGCAAGA CAGTCATTGC CATTGACTAC TACAACATGT TCACCAGCAC CTTCACCCTA
18
19  424 ACTGCCATGA GTGTGGATCG CTATGTAGCC ATCTGCCACC CCATCCGTGC CCTCGACGTC
20
21  484 CGCACGTCCA GCAAAGCCCA GGCTGTCAAT GTGGCCATCT GGGCCCTGGC CTCTGTTGTC
22
23  544 GGTGTTCCCG TTGCCATCAT GGGCTCGGCA CAGGTCGAGG ATGAAG
24
25
26
27
28
29
30
31
32
33
34
35
36
590          AGAT CGAGTGCCTG
604 GTGGAGATCC CTACCCCTCA GGATTACTGG GGCCCGGTGT TTGCCATCTG CATCTTCCTC
664 TTCTCCTTCA TCGTCCCCGT GCTCGTCATC TCTGTCTGCT ACAGCCTCAT GATCCGGCGG
724 CTCCGTGGAG TCCGCTGCT CTCGGGTCC CGAGAGAAGG ACCGGAACCT GCGGCGCATC
784 ACTCGGCTGG TGCTGGTGGT AGTGGCTGTG TTCGTGGGCT GCTGGACGCC TGTCCAGGTC
844 TTCGTGCTGG CCCAAGGGCT GGGGGTTCAG CCGAGCAGCG AGACTGCCGT GGCCATTCTG
904 CGCTTCTGCA CGGCCCTGGG CTACGTCAAC AGCTGCCTCA ACCCATCCT CTACGCCTTC
964 CTGGATGAGA ACTTCAAGGC CTGCTTCCGC AAGTTCTGCT GTGCATCTGC CCTGCGCCGG
1024 GACGTGCAGG TGCTGACCG CGTGCAGCAGC ATTGCCAAGG ACGTGGCCCT GGCTGCAAG
1084 ACCTCTGAGA CGGTACCGCG GCGCGCATGA CTAGGCGTGG ACCTGCCCAT GGTGCCTGTC
1144 AGCCCGCAGA GCGCATCTAC GCGCAACACA GAGCTCACAC AGGTCACTGC TCTCTAGGCG
1204 GACACACCCT GGGCCCTGAG CATCCAGAGC CTGGGATGGG CTTTTCCTTG TGGGCCAGGG
1264 ATGCTCGGTC CCAGAGGAGG ACCTAGTGAC ATCATGGGAC AGGTCAAAGC ATTAGGGCCA
1324 CCTCCATGGC CCCAGACAGA CTAAAGCTGC CCTCCTGGTG CAGGGCCGAG GGGACACAAG
1384 GACCTACCTG GAAGCAGCTG ACATGCTGGT GGACGGCCGT TACTGGAGCC CGTGCCCTC
1444 CCTCCCCGTG CTTCATGTGA CTCTGGCCT CTCTGCTGCT GCGTTGGCAG AACCTGGGT
1504 GGGCAGGCAC CCGGAGGAGG AGCAGCAGCT GTGTCATCCT GTGCCCCCA TGTGCTGTGT
1564 GCTGTTTGCA TGGCAGGGCT CCAGCTGCCT TCAGCCCTGT GACGTCTCCT CAGGGCAGCT
1624 GGACAGGCTT GGCACGGCCC GGAAGTGCA GCAGGCAGCT TTTCTTTGGG GTGGGACTTG
1684 CCCTGAGCTT GGAGCTGCCA CCTGGAGGAC TTGCCTGTTC CGACTCCACC TGTGCAGCCG
1744 GGGCCACCCC AGGAGAAAGT GTCCAGGTGG GGGCTGGCAG TCCCTGGCTG CAG

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